## Squid, Nautical Charts, and Pair Seining

American fishermen if exported to Europe, according to a Massachusetts Institute of Technology Sea Grant Program study. U.S. consumers reportedly have a "poor attitude" toward squid which is particularly popular in Mediterranean areas and the Orient....

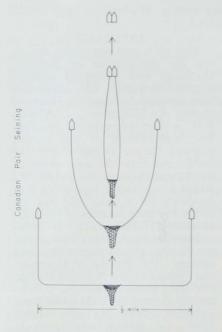
... Expansion of Sea Grant activities to include other nations is being studied at the University of Rhode Island's International Center for Marine Resource Development. Plans for a conference on the idea are also in the works, reports Sea Grant 70's ....

marine food chain via a tropical coral mucus eaten by certain reef fish, according to a Scripps Institution of Oceanography scientist. The mucus is rich in triglyceride and wax ester—the latter a major energy source for most temperate and polar ocean fish. Wax globules can absorb spilled oil which could then be eaten by the fish....

....Fish "coughing" may help indicate water pollution levels according to Environmental Protection Agency aquatic biologists at the National Water quality laboratory. Duluth. Minn. By comparing "coughs" per minute (normal gill-cleaning process), researchers hope to learn how to keep tabs on industrial wastes in lakes and streams. Short-term effects of 10 heavy metals and pesticides are being studied . . . .

have recently been appointed to the Marine Resources Advisory Committee of the Coastal Plains Regional Commission and to the Board of Trustees of the Coastal Plains Marine Center, by South Carolina Gov. John C. West, according to The Marine Newsletter. Hudson is chairman of the South Carolina Wildlife and Marine Resources Commission and Welch is Executive Director of the South Carolina State Ports Authority. . . .

**Experimental Canadian pair** seining<sup>1</sup> by two Pt. Judith, R.I. lobstermen hauled in nearly 1.5 tons of fish per day, including codfish, flounder, and whiting, for a satisfactory income. University of Rhode Island fisheries specialists report. The two vessels laid out thousands of feet of steel and fabric line along the ocean floor (see figure below) and line movement frightened fish toward the oncoming bottom trawl. Rigging cost for two boats runs about \$6-12,000....



automatic acquisition of hydrographic survey data, will be installed aboard various NOAA ships and launches, reports the Department of Commerce. Originally designed and developed by NOAA's National Ocean Survey, HYDROPLOT's specialized equipment greatly reduces nautical chart production time . . . .

.... The Gulf of Mexico will be the first area with computerized nautical chart data when NOAA's automated hydrographic data bank begins operation in about a year. Data automation

<sup>1</sup>Canadian Pair Seining: Off-season Source of Income for New England Lobstermen? Marine Fisheries Review 36:7, p. 45. for all of NOAA's 971 nautical charts is set for 1980 . . . .

.... Synopses of blue and white marlin, and sailfish catches in the southeast Atlantic, Gulf of Mexico, and Caribbean Sea are given in the NMFS' second annual Oceanic Gamefish Investigations Newsletter. Fishing effort and time of day are compared with catches, and historical fish weight and distribution data are noted. Fishing tournament results. Skylab Oceanic Gamefish Project fishing details, and western Atlantic billfish catches by the Japanese longliners (1957-1971) are listed. Free copies are available from the Southeast Fisheries Center. NMFS. NOAA, 75 Virginia Beach Dr., Miami, FL 33149 ...

.... New Executive Director of the Marine Technology Society is Mrs. Elizabeth M. (Libby) Wallace, the Society reports. She has been Executive Director of the New York based Shellfish Institute of North America for the past 10 years . . . .

become a natural field laboratory under NOAA's first estuarine sanctuary acquisition grant. \$823,965. Limited public recreation and oyster farming may be permitted as researchers monitor changes, assess human influences, seek baseline ecological data, and determine the area's carrying capacity....

Chlorination substantially increases sewage toxicity to salmon from primary treatment plants reports the International Pacific Salmon Fisheries Commission. New Westminster, B.C. Effluent from a secondary treatment plant, where chlorine was removed in a lagoon, was found non-toxic for exposures as long as 26 days in direct exposure, however....

survey has been extended another year by the Coastal Plains Regional Commission, *The Marine Newsletter* reports. Baseline data on the biological, chemical, and physical nature of major estuaries is sought by Wildlife and Marine Resource Department biologists....